

## **REMARKS**

In the Office Action dated March 26, 2004, the Examiner rejected claims 1, 5, 8, 10, 16, 18, and 36 under 35 U.S.C. § 112, first paragraph, as based on a non-enabling disclosure; rejected claims 1, 2, 4-6, 8, 18-28 and 32-40 under 35 U.S.C. § 103(a) as being unpatentable over Apte et al. (U.S. Patent No. 6,269,373); and objected to claims 9-17 and 29-31 as being dependent upon a rejected base claim, but indicated that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

By this amendment Applicant has amended the specification and claim 1. In the current Office Action, the Examiner did not address the status of the Amendment filed on January 6, 2004 under 37 C.F.R. § 1.116, however, the Examiner withdrew the finality of the previous Office Action. The M.P.E.P provides that "[w]hen a final rejection is withdrawn, all amendments filed after the final rejection are ordinarily entered." M.P.E.P. § 706.07(e), at 700-76. Accordingly, because the Examiner did not indicate otherwise, Applicant assumes that the Amendment filed on January 6, 2004 has been entered. Claims 1, 2, 4-6, and 8-40 remain pending in this case.

### **I. Claim Rejections Under 35 U.S.C. § 112, First Paragraph**

The rejection of claims 1, 5, 8, 10, 16, 18, and 36 under 35 U.S.C. § 112, first paragraph, is respectfully traversed for the following reasons. The Examiner rejected claims 1, 5, 8, 10, 16, 18, and 36 because the term "SQL" was defined in the specification as both Structure Query Language and Structure Query Logic. By this Amendment, the specification and claim 1 have been amended to define "SQL" as "Structure Query Language," and not "Structure Query Logic," thus obviating this

rejection. Accordingly, Applicant respectfully requests that the rejection of claims 1, 5, 8, 10, 16, 18, and 36 under 35 U.S.C. § 112, first paragraph, be withdrawn and the claims allowed.

## **II. Claim Rejections Under 35 U.S.C. § 103(a)**

The rejection of claims 1, 2, 4-6, 8, 18-28, and 32-40 under 35 U.S.C. § 103(a) is respectfully traversed for the following reasons.

To establish a prima facie case of obviousness, three basic criteria must be met. First, the prior art reference or references, taken alone or combined, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03. Second, there must be some suggestion or motivation in the reference itself to modify the reference in a manner resulting in the claimed invention. See M.P.E.P. § 2143. Third, a reasonable expectation of success must exist. See M.P.E.P. § 2143.02. Moreover, each of these requirements must “be found in the prior art, and not based on applicant’s disclosure.” M.P.E.P. § 2143.

Applicant notes that the Examiner failed to respond to the arguments Applicant presented in the Appeal Brief dated January 6, 2004, to which the Examiner indicated the current Office Action was in response. Instead, the Examiner merely restated the response to Applicant’s arguments presented in the response dated June 16, 2003, which the Examiner previously provided in the Office Action dated August 11, 2003. Moreover, the Examiner provided no new grounds for rejection. Accordingly, in the event that Examiner disagrees with Applicant’s arguments provided herein and maintains the rejection of claims 1, 2, 4-6, 8, 18-28, and 32-40 under

35 U.S.C. § 103(a), Applicant requests that the Examiner issue another non-final rejection where the Examiner responds to the arguments presented herein and in the previously filed Appeal Brief in order to provide Applicant with proper opportunity to address any such responses. See M.P.E.P. § 707.07(f).

**A. The Rejection of Claims 1, 2, 4-6, 8, and 18.**

Claim 1, recites a combination including, *inter alia*, “receiving a Structured Query Logic (SQL) call at the computer system; mapping the SQL call to a general computer language programming call of a computer application; and executing the programming call to invoke functions of the computer application that correspond to functions specified by the SQL call.” The Examiner alleged that Apte et al. teaches receiving an SQL call, but conceded that Apte et al. does not explicitly disclose mapping the SQL call to a general computer language programming call of a computer application; and executing the programming call to invoke functions of the computer application that correspond to functions specified by the SQL call. See Office Action ¶ 5, at 5-6. The Examiner further alleged, however, that the reference itself, along with the knowledge generally available to one of ordinary skill in the art, suggests modifying Apte et al. in a manner that compensates for the above noted deficiencies. See Id. Applicant disagrees.

Contrary to Examiner’s allegations, Apte et al. does not teach or suggest receiving an SQL call at a server computer system. Instead, the user in Apte et al. submits an object-oriented programming call to a remote server object to invoke a method on that server object. See Apte et al., col. 7, lines 7-17. A remote method invocation such as this is not the same as an SQL call. The Examiner points

specifically to Apte et al.'s disclosure that "[c]lient object 400 may initiate calls to server object 402 to access database 404 based on various business rules or business logic implemented within server object 402," alleging that this disclosure is readable the receipt of an SQL call at the computer system. Apte et al., col. 6, lines 31-34; Office Action ¶ 3, at 2. This assertion is mistaken.

Although the identified passage in Apte et al. mentions accessing a database using business rules or business logic, it does not disclose the receipt of an SQL call at the server object. Instead, the passage merely discloses the receipt of an object-oriented programming call to invoke a remote method. Further, the reference discloses that a client may initiate a call to a server object to access a database. See Apte et al., col. 6, lines 31-33. But it is the server object, not the client, that formulates a database access command based on the "business rules or business logic implemented within the server object." Apte et al., col. 6, lines 33-34 (emphasis added). The reference makes no mention of using database rules or logic at the client object and no mention of an SQL call being submitted to the server object. The business rules and/or business logic used to access a database in Apte et al. are contained within the server object and are not provided by the user in the form of an SQL call or any database protocol command. Thus, the server object in Apte et al. does not receive SQL calls from a client, but instead uses database protocol language interfaces to obtain information from the database. Nothing in Apte et al. suggests that the user is submitting anything more than a simple object-oriented programming request to invoke a remote database access method.

Moreover, during the interview held on November 6, 2003 with Applicant's representatives, the Examiner was unable to identify any disclosure in the reference that teaches or suggests the receipt of SQL calls or database protocol commands, as recited in Applicant's claims. During the interview, Applicant's representatives explained the difference between the SQL calls and database protocol command, allegedly disclosed in Apte et al., and the object-oriented programming requests actually disclosed in Apte et al. At first, the Examiner rested on the citations provided in the Office action, however, when pressed, the Examiner could not explain why the cited passages taught the receipt of SQL calls or database protocol commands, as the Examiner had alleged. Ultimately, when asked by Applicant's representatives, the Examiner could not, and would not, point to any particular portion of Apte et al. that supported his position that the reference taught the receipt of SQL calls or database protocol commands. The Examiner has not remedied this discrepancy in the current Office Action. Accordingly, Apte et al. fails to teach or suggest receiving an SQL call at the computer system, as recited in claim 1.

Further, the Examiner conceded that Apte et al. fails to explicitly disclose "mapping the SQL call to a general computer language programming call of a computer application," as recited in claim 1, but alleged that this is implicitly disclosed. See Office Action ¶ 3, at 5-6. The Examiner is incorrect.

There is no infrastructure in Apte et al. to map an SQL call received by the server object. The Examiner asserted that the process disclosed in Apte et al. of mapping references to a CORBA server containing Enterprise Java Beans (EJB's) is equivalent to the claimed mapping step of claim 1. See Apte et al., col. 16, line 66 to col. 17, line

3; Office Action ¶ 3, at 5-6. Applicant disagrees. The Object Request Browsers (ORB's) in Apte et al. invoke a remote method identified by an object-oriented programming call submitted by the user. See Apte et al., col. 7, lines 7-17 & col. 8, lines 10-23. The process disclosed in Apte et al. "flattens" CORBA server references into data strings and stores this information in a back-end data store as a way to persist EJB's. See Apte et al., col. 17, lines 4-39. When an object-oriented programming call is submitted by the client, this back-end data store is used to process the remote method invocation. This process of using object-oriented programming techniques and a back end data store with flattened CORBA references to invoke remote methods is not the same as receiving and mapping an SQL call. Apte et al. fails to show any capabilities for mapping an SQL call received from the client to a general computer language programming call, and therefore fails to teach or suggest "mapping the SQL call to a general computer language programming call of a computer application," as recited in claim 1.

Finally, the Examiner conceded that Apte et al. fails to explicitly disclose "executing the general computer language programming call to invoke functions of the computer application that correspond to functions specified by the SQL call," as recited in claim 1, but again asserted that this is implicitly disclosed. See Office Action ¶ 5, at 5-6. The Examiner is incorrect. As previously discussed, Apte et al. fails to teach or suggest either the receipt of an SQL call or mapping the SQL call to a general computer language programming call. Consequently, Apte et al. likewise fails to teach or suggest "executing the general computer language programming call in a manner specified by the SQL call," as recited in the claim.

Moreover, the Examiner failed to establish a proper suggestion or motivation to modify Apte et al. in a manner that would result in the claimed invention. The Examiner stated that “[i]t would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Apte with mapping the database call to a general computer language programming call of a computer application; and executing the general computer language programming call to invoke functions of the computer application that correspond to functions specified by the database call.” Office Action ¶ 5, at 6. This statement, however, is insufficient to establish a prima facie case of obviousness because it is established that “[t]he level of skill in the art cannot be relied upon to provide the suggestion to combine references.” M.P.E.P. § 2143.01, at 2100-125 (citing Al-Site Corp. v. VSI Int’l Inc., 174 F.3d 1308 (Fed. Cir. 1999)). The Examiner’s conclusionary statement is insufficient to show the proper motivation or suggestion required in an obviousness-type rejection. Furthermore, “[a]lthough a prior art device ‘may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” Id. § 2143.01, at 2100-126 (quoting In re Mills, 916 F.2d 680, 682 (Fed. Cir. 1992)) (emphasis added). As explained above, there is no such suggestion in Apte et al.

For at least the foregoing reasons, the rejection of claim 1 is unsupported by the cited art. Accordingly, Applicant requests that the Examiner’s rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn and the claim allowed.

Claims 2, 4-6, 8, and 18 depend upon allowable claim 1. As explained above, the rejection of claim 1 is unsupported by the cited art. Accordingly, the rejection of claims 2, 4-6, 8, and 18 is likewise unsupported by the cited art for at least the reasons

given with respect to claim 1. Applicant therefore requests that the Examiner's rejection of claims 2, 4-6, 8, and 18 under 35 U.S.C. § 103(a) be withdrawn and the claims allowed.

**B. The Rejection of Claims 19-25.**

Claim 19 recites a combination, which includes, *inter alia*, "receiving a database protocol command for accessing elements in a database" and "converting said database protocol command into a general computer programming language command for accessing said database." The Examiner addressed claim 19 in association with claim 1, and in doing so, relies on the analysis of claim 1 in rejecting claim 19. Accordingly, the Examiner appears to be alleging that Apte et al. either explicitly or implicitly teaches all recitations of claim 19, and that the reference itself, along with the knowledge generally available to one of ordinary skill in the art, suggests modifying Apte et al. in a manner that compensates for any deficiencies of the reference. See Office Action ¶ 3, at 5-6. Applicant disagrees.

Contrary to Examiner's allegations, Apte et al. does not teach or suggest "receiving a database protocol command for accessing elements in a database." As explained above, Apte et al. merely discloses the receipt, by the server object, of object-oriented programming calls to invoke remote methods on the server object. All use of business methods, business logic, and database protocol language occurs within the server object itself; such commands are neither provided by the client nor received by the server. Thus, Apte et al. fails to teach or suggest "receiving a database protocol command for accessing elements in a database," as recited in claim 19 (emphasis added).

Moreover, because Apte et al. fails to teach or suggest the receipt of a database protocol command, it consequently fails to teach or suggest “converting said database protocol command into a general computer programming language command for accessing said database,” as recited in claim 19 (emphasis added).

Furthermore, the Examiner failed to establish a proper suggestion or motivation to modify Apte et al. in a manner resulting in the claimed invention. As previously explained, a statement that “[i]t would have been obvious to a person of ordinary skill in the art to modify the teachings of Apte,” (see Office Action ¶ 5, at 6), is insufficient to establish a prima facie case of obviousness because the level of skill in the art cannot be relied upon to provide the suggestion to modify a reference (see M.P.E.P. § 2143.01, at 2100-125 (citing Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308 (Fed. Cir. 1999))). The Examiner’s unsupported conclusions that it would have been obvious to modify Apte et al. are insufficient to show the proper motivation required in an obviousness-type rejection.

For at least the foregoing reasons, the rejection of claim 19 is unsupported by the cited art. Accordingly, Applicant requests that the Examiner’s rejection of claim 19 under 35 U.S.C. § 103(a) be withdrawn and the claim allowed.

Claims 20-25 depend upon allowable claim 19. As explained above, the rejection of claim 19 is unsupported by the cited art. Accordingly, the rejection of claims 20-25 is likewise unsupported by the cited art for at least the reasons given with respect to claim 19. Applicant therefore requests that the Examiner’s rejection of claims 20-25 under 35 U.S.C. § 103(a) be withdrawn and the claims allowed.

**C. The Rejection of Claims 26-28.**

Claim 26 recites a combination, which includes, *inter alia*, “exposing software components, in a first computer programming language, of an application server as database elements, said software components being operative for accessing said database,” “receiving a database protocol command,” and “converting the database protocol command to a command syntax of the first computer programming language corresponding to at least a selected one of said software components.” The Examiner alleged that Apte et al. either explicitly or implicitly teaches all recitations of Appellant’s claim 26, relying in part on the analysis of claims 1 and 19. Applicant disagrees.

Contrary to Examiner’s allegations, Apte et al. does not teach or suggest “receiving a database protocol command for accessing the database at the application server.” As explained above regarding claim 19, Apte et al. fails to teach or suggest receiving a database protocol command because all use of database protocol language occurs within the server object itself; such commands are neither provided by the client nor received by the server.

Further, Apte et al. fails to teach or suggest “exposing software components, in a first computer programming language, of an application server as database elements, said software components being operative for accessing said database or converting the database protocol command to a command syntax of the first computer programming language corresponding to at least a selected one of said software components,” as recited in claim 26.

The process described with respect to Fig. 4 of Apte et al. (cited by the Examiner) does not teach, suggest, or even mention converting database protocol commands to a command syntax of any language, much less a programming language

corresponding to a selected one of the software components exposed as database elements. The Examiner alleged that the ability of server object 402 in Apte et al. to provide access to current enterprise applications 410 and legacy applications 408 as well as the database 404 discloses accessing said database using said selected one of said software components. See Office Action ¶ 5, at 8. The Examiner's interpretation of Apte et al. is incorrect.

Although the server object in Apte et al. can provide access to other applications in addition to the database, such access has nothing to do with converting database protocol commands to a command syntax. For example, if a client invokes a method relating to either enterprise or legacy applications, then the server object will run the method to access these applications and retrieve the requested data. The server object only uses a database access language, such as a JDBC SQL interface, to access relational databases contained in the database object 404. See Apte et al., col. 6, lines 46-51. The server object's ability to access other applications does not have anything to do with that object's use of SQL interfaces, and accordingly does not convert any database protocol commands. Therefore, Apte et al. fails to teach or suggest "converting the database protocol command to a command syntax of the first computer programming language corresponding to at least a selected one of said software components," as recited in claim 26.

Moreover, the Examiner failed to establish a proper suggestion or motivation to modify Apte et al. in a manner resulting in the claimed invention. With respect to claim 26, the Examiner identified no suggestion or motivation, in either the reference itself or the skill in the art, to modify Apte et al. The only statement made by the Examiner

regarding a suggestion or motivation to modify Apte et al. was in regard to claims 1 and 19, where the Examiner alleged that “[i]t would have been obvious to a person of ordinary skill in the art to modify the teachings of Apte.” See Office Action ¶ 5, at 6. As mentioned above, such a statement is insufficient to establish a prima facie case of obviousness because the level of skill in the art cannot be relied upon to provide the suggestion to modify a reference. See M.P.E.P. § 2143.01, at 2100-125 (citing Al-Site Corp. v. VSI Int’l Inc., 174 F.3d 1308 (Fed. Cir. 1999)).

For at least the foregoing reasons, the rejection of claim 26 is unsupported by the cited art. Accordingly, Applicant requests that the Examiner’s rejection of claim 26 under 35 U.S.C. § 103(a) be withdrawn and the claim allowed.

Claims 27-28 depend upon allowable claim 26. As explained above, the rejection of claim 26 is unsupported by the cited art. Accordingly, the rejection of claims 27-28 is likewise unsupported by the cited art for at least the reasons given with respect to claim 26. Applicant therefore requests that the Examiner’s rejection of claims 27-28 under 35 U.S.C. § 103(a) be withdrawn and the claims allowed.

#### **D. The Rejection of Claims 32-40.**

Claim 32 recites a combination, which includes, *inter alia*, “a command converter operative to convert a first database programming language call received from the computer to a general computer programming language call that corresponds to the database programming language call.” The Examiner alleges that Apte et al., either explicitly or implicitly, teaches all the recitations of Appellant’s claim 32, relying in part on the analysis of claim 1. Applicant disagrees.

Contrary to Examiner's allegations, Apte et al. does not teach or suggest "a command converter operative to convert a first database programming language call received from the computer to a general computer programming language call that corresponds to the database programming language call." As previously explained, the calls generated by the client in Apte et al. are not database programming language calls, they are object-oriented programming calls for invoking remote methods from a server object. All use of database protocol language occurs within the server object itself; such commands are neither provided by the client nor received by the server. Additionally, as discussed above, Apte et al. does not teach or suggest a method of converting the database programming language calls. Accordingly, Apte et al. fails to teach or suggest "a command converter operative to convert a first database programming language call received from the computer to a general computer programming language call that corresponds to the database programming language call," as recited in claim 32.

Moreover, as discussed above with respect to claims 1 and 19, the Examiner failed to establish a proper suggestion or motivation to modify Apte et al. in a manner resulting in the claimed invention. For at least the foregoing reasons, the rejection of claim 32 is unsupported by the cited art. Accordingly, Applicant requests that the Examiner's rejection of claim 32 under 35 U.S.C. § 103(a) be withdrawn and the claim allowed.

Claims 33-40 depend upon allowable claim 32. As explained above, the rejection of claim 32 is unsupported by the cited art. Accordingly, the rejection of claims 33-40 is likewise unsupported by the cited art for at least the reasons given with respect

to claim 32. Applicant therefore requests that the Examiner's rejection of claims 33-40 under 35 U.S.C. § 103(a) be withdrawn and the claims allowed.

### III. Claim Objections

The Examiner objected to claims 9-17 and 29-31 as being dependent upon a rejected base claim. Claims 9-17 depend upon claim 1 and claims 29-31 depend upon claim 26. As explained above, claims 1 and 26 are allowable because the rejection of these claims under 35 U.S.C. § 103(a) is unsupported by the cited art, thus obviating this objection. Accordingly, Applicant requests that the objection to claims 9-17 and 29-31 be withdrawn and the claims allowed.

### IV. Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.


Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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